


Safety information
VALDOR FLEX
 A water dispersible granule formulation containing 360 g/kg diflufenican and 10 g/kg iodosulfuron-methyl-sodium.



Warning
Causes serious eye irritation
Very toxic to aquatic life with long lasting effects. Wear protective gloves / protective clothing / eye / face protection. If eye irritation persists. Get medical advice/attention. Pick up spillage. Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste. **To avoid risks to human health and the environment, comply with the instructions for use.** PCS No. 05612



valdor
FLEX

HERBICIDE

- ✓ A non-selective herbicide for the control of annual and perennial weeds in non-crop areas (permeable surfaces overlying soil) and railway ballast.
- ✓ A water dispersible granule formulation containing 360 g/kg diflufenican and 10 g/kg iodosulfuron-methyl-sodium.

For professional use only.



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Valdor Flex - IE - 10 g - IE85348787C - A1a - ARTICLE 85329634

For 24 hour emergency information contact Bayer **Bayer**

CropScience Limited
 Freephone 00800 1020 3333

or

For information or to report a poisoning incident contact The National Poisons Information Centre, Beaumont Hospital, Dublin (01-3092166), retain the label for reference.

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www.environmentalscience.bayer.co.uk
 for SDS and larger label

Batch number - see on the pack



valdor[®]
FLEX



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PCS No. 05612

Directions for use

Directions for use
FOR USE ONLY AS AN INDUSTRIAL HERBICIDE
FOR PROFESSIONAL USE ONLY

Situation: Pre- and post-emergence total weed control in non-crop areas (permeable surfaces overlying soil) and railway ballast
Maximum individual dose: 0.5 kg product/ha
Maximum number of treatments: 1 per year
Earliest time for application: Beginning of March
Latest time of application: End of June
Method of Application: Hand-held / knapsack sprayer or track dedicated low drift application system

Equipment	Area	Product required	Water volume
Hand-held / knapsack	100 m ²	5 g	3 - 5 L
Track dedicated low drift application system	1 ha	0.5 kg	300 - 500 L

To minimise spray drift, the product must be applied using a nozzle capable of producing a coarse quality spray (e.g. Hypro Polijet AN0.6 or equivalent), or a track dedicated low drift application system. This product must not be applied to any non-porous man-made surfaces. This product must not be applied through ultra-low volume or CDA applicators.

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

SAFETY PRECAUTIONS

Operator Protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment: WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND EYE PROTECTION (GOGGLES) when handling the product and during application. WASH HANDS AND EXPOSED SKIN before eating and drinking and after work. IF SWALLOWED, seek medical advice immediately and show this container or label.

Environmental Protection

Do not contaminate water with the product or its container. (Do not clean application equipment near surface water / Avoid contamination via drains, farmyards and roads). Extreme care must be taken to avoid spray drift onto non-target plants outside the target area.

Handheld Equipment: To protect aquatic organisms respect an unsprayed buffer zone of 2m to surface water bodies

Train Sprayer: To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies. Do not allow direct overspray of static or flowing surface waters.

Storage and Disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS. KEEP OUT OF REACH OF CHILDREN. KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. EMPTY CONTAINER COMPLETELY and dispose of safely. PROTECT FROM FROST. RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinse three times. Add washings to sprayer at time of filling and dispose of safely. Triple rinsed containers should be punctured to prevent re-use and may be disposed of by an authorised contractor or at a municipal waste recycling site.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

GENERAL INFORMATION

VALDOR FLEX is a water dispersible granule formulation containing 360 g/kg diflufenican and 10 g/kg iodosulfuron-methyl-sodium. VALDOR FLEX is a persistent, non-selective/"total" herbicide for control of a wide range of annual and perennial grasses and broad-leaved weeds for up to 4 months on non-crop areas (permeable surfaces overlying soil) such as: gravel paths and driveways, porous surfaces alongside roadways and fence lines, porous strips of land adjacent to buildings, industrial sites, timber yards, farm yards, oil and gas storage sites, power stations, electric sub-stations, beneath pylons, around street/park obstacles and furniture, porous areas near to trees and shrubs and other natural surfaces where vegetation is not desirable, and railway ballast.

VALDOR FLEX can be applied alone to give pre- and early post-emergence weed control, or in a tank mixture with a commercially approved glyphosate formulation to give post-emergence weed control. One application of VALDOR FLEX can be made in each year between the beginning of March and the end of June. VALDOR FLEX can be applied during cold weather. However application to frozen ground should be avoided.

VALDOR FLEX is to be dispersed in water (0.5 kg in 300 - 500 L) and should be applied using hand-held applicators. A drift shield may be used. For application to railway ballast, a track dedicated low drift application system may also be used.

Bayer Tip: For established deep rooted perennial weeds such as dandelion, thistle, dock and nettles which may be re-generating, a post-emergence application with a commercially approved glyphosate formulation is ideally required.

RESTRICTIONS

Since there is a risk to aquatic life from use, direct spray must not be allowed to fall within 2 m of the top of the bank of any static or flowing waterbody or the top of a ditch which is dry at the time of application. Spray must be aimed away from water. Direct spray from the train sprayer must not be allowed to fall within 5 m of the top of the bank of a static or flowing water body. Do not allow direct overspray of static or flowing surface waters. Applications should not be made to plants growing under stress conditions, such as drought or waterlogging, as reduced levels of control may result. Do not spray in windy weather. Extreme care must be taken to avoid drift onto non-target plants, this includes: all green plant parts such as leaf surfaces, young bark or suckers of valued plants. Failure to do so may result in permanent damage or plant death. Where VALDOR FLEX has been applied to sites that are subsequently to be cleared or grubbed, a period of at least 6 months should elapse between treatment and the sowing and planting of subsequent crops. In addition, the soil should be ploughed or dug afterwards to ensure thorough mixing in order to remove any risk of damaging subsequent crops or planting. Where VALDOR FLEX or other products containing diflufenican are applied in successive years, levels of diflufenican will build up in the soil. Even where soils are thoroughly dug there may be a risk of damage to subsequent plantings. Care should be taken when applying VALDOR FLEX as heavy rain following application may wash the herbicide onto sensitive areas such as newly sown grass and areas about to be planted. Where the soil organic matter content is greater than 10%, or for example where leaves have collected or where a mat of organic matter has built up, pre-emergence activity will be reduced. For maximum persistence of activity the area treated should not be cultivated or raked following application. For maximum pre-emergence and residual activity from VALDOR FLEX please ensure good coverage of the spray swath. Overdosing should be avoided. DO NOT APPLY VALDOR FLEX OVER DRAINS OR IN DRAINAGE CHANNELS, GULLIES OR SIMILAR STRUCTURES FOR MOVING WATER.

WEEDS CONTROLLED

Strains of some annual weeds (e.g. black-grass, wild-oats, and Italian rye-grass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group (WRAG) and copies are available from Teagasc, your distributor, crop adviser or product manufacturer. The presence of enhanced metabolism herbicide resistant populations of Italian rye-grass may lead to unacceptable levels of control. To reduce the risk of developing resistance or where resistance to sulfonylurea herbicides is suspected, applications should be made to young, actively growing weeds.

Key aspects of the VALDOR FLEX resistance management strategy are:

- ALWAYS follow WRAG guidelines for preventing and managing herbicide resistant grass and broad-leaved weeds.
- DO NOT use VALDOR FLEX as a stand-alone spring treatment for black-grass, rye-grass or common chickweed. Use only in sequence with a robust herbicide programme based on products with non-ALS modes of action.
- IDEALLY apply VALDOR FLEX early to young actively growing weeds and before stem extension of grass weeds.
- DO NOT use VALDOR FLEX as the sole means of grass weed or broad-leaved weed control in successive years.
- ALWAYS rotate use of grass and broad-leaved weed herbicides with non-ALS modes of action.
- ALWAYS monitor weed control effectiveness and investigate any odd patches of poor grass or broad-leaved weed control. If unexplained contact your agronomist or technical advisor, who may consider a resistance test appropriate.
- Only one application of VALDOR FLEX may be made per year.

VALDOR FLEX controls susceptible annual and perennial weeds if applied pre- or early post-emergence, as directed in **Rates of Use**, or post-emergence in tank mixture with an authorised formulation of glyphosate.

Annual meadowgrass	<i>Poa annua</i>
Creeping thistle	<i>Cirsium arvense</i>
Bristly ox-tongue	<i>Helminthotheca echioides</i>
Canadian fleabane	<i>Corycaea canadensis</i>
Groundsel species, ragwort	<i>Senecio spp.</i>
Sowthistle species	<i>Sonchus spp.</i>
Mayweed species, pineapple weed	<i>Matricaria spp.</i>
Yarrow	<i>Achillea millefolium</i>
Cranesbill species	<i>Geranium</i>
Willowherb species	<i>Epilobium spp.</i>
Plantain species	<i>Plantago spp.</i>
Knotweed species	<i>Bistorta spp.</i>
Speedwell species	<i>Veronica spp.</i>

SUSCEPTIBILITY OF NON-TARGET SPECIES

Trials have been conducted to evaluate the susceptibility of ornamental plants which could be exposed to spray drift during application. The following species are resistant to the product.

Field maple (*Acer campestre*), red horse chestnut (*Aesculus x carnea*), horse chestnut (*Aesculus hippocastanum*), Persion silk tree (*Albizia julibrissin*), common alder (*Alnus glutinosa*), Italian alder (*Alnus cordata*), grey alder (*Alnus incana*), Berberis x ottawensis 'Auricom', Himalayan birch (*Betula utilis*), silver birch (*Betula pendula*), Judas tree (*Cercis siliquastrum*), European nettle tree (*Celtis australis*), European hornbeam (*Carpinus betulus*), Turkish hazel (*Corylus colurna*), Deutzia magnifica, Ebbinges silverberry (*Elaeagnus ebbingei*), European beech (*Fagus sylvatica*), border forsythia (*Forsythia intermedia*), raywood ash (*Fraxinus oxycarpa*), European ash (*Fraxinus excelsior*), manna ash (*Fraxinus ornus*), rose mallow (*Hibiscus syriacus*), holly (*Ilex aquifolium*), common walnut (*Juglans regia*), Pride of India tree (*Koeleruteria paniculata*), lavender 'Edelweiss' (*Lavandula x intermedia* 'Edelweiss'), garden privet (*Ligustrum ovalifolium*), sweet gum (*Liquidambar styraciflua*), tulip tree (*Liriodendron tulipifera*), bull bay (*Magnolia grandiflora*), white mulberry (*Morus alba*), Japanese mulberry (*Morus bombycis*), mulberry tree (*Morus kagayama*), olive (*Olea europaea*), foxglove tree (*Pavlovnia tomentosa*), scentless mock-orange (*Philadelphus inodorus*), Philadelphus species, Photinia x fraseri, black poplar (*Populus nigra*), cherry plum (*Prunus cerasifera*), callery pear (*Pyrus calleryana*), Turkey oak (*Quercus cerris*), pin oak (*Quercus palustris*), English oak (*Quercus robur*), northern red oak (*Quercus rubra*), common lilac (*Syringa vulgaris*), large-leaved linden (*Tilia platyphyllos*), small-leaved linden (*Tilia cordata*), quelder rose (*Viburnum opulus*), Viburnum farrei, Viburnum tinus.

List of sensitive ornamental plants: juneberry (*Amelanchier canadensis*), red-barked dogwood (*Cornus alba*), flowering dogwood (*Cornus florida*).

Application around or under other species not listed here is not recommended.

SITUATION SPECIFIC INFORMATION

Use Areas

VALDOR FLEX may be used in non-crop areas against weeds in open soil and against weeds growing in gravel or other porous surfaces. Examples of suitable use areas include gravel paths and driveways, porous surfaces alongside roadways and fence lines, porous strips of land adjacent to buildings, industrial sites, timber yards, farm yards, oil and gas storage sites, power stations, electric sub-stations, beneath pylons, around street/park obstacles and furniture, porous areas near to trees and shrubs and other natural surfaces where vegetation is not desirable. VALDOR FLEX may also be used on railway track, railway sidings and other ballast areas of rail infrastructure.

Rates of Use

Equipment	Area	Product required	Water volume	Spray Quality (Nozzle)	Buffer Zone
Hand-held / knapsack	100 m ²	5 g	3 - 5 L	* Hypro Coarse Polijet AN0.6 or similar	2 m
Track dedicated low drift application system	1 ha	0.5 kg	300 - 500 L	Coarse Radiarc nozzle or similar	5 m

*Hypro Polijet AN0.6 nozzle provided gives, subject to calibration: a coarse spray with a flow rate of 0.6 L/min at 1 bar, giving 225 L/ha at 4kph walking speed, swath width of 40 cm, 40 cm nozzle height

Application Timing

Apply in early spring to weed-free soil, or apply in a tank-mix with an authorised glyphosate-containing product if unwanted vegetation is already present. Apply at any time from March until the end of June. At least six hours, but preferably 24 hours of dry weather are required immediately following application of a tank-mix with glyphosate for optimum control.

Bayer Tip: For post-emergence application ideally annual broad-leaved weeds should have at least two fully expanded true leaves and annual grasses should be at the one leaf growth stage or beyond. Some perennial weeds, including docks, perennial sowthistle and willowherb are best treated just before flowering or the setting of seed.

MIXING AND SPRAYING

Half fill the spray tank with clean water. Add the required quantity of VALDOR FLEX. Top up to the required volume with water and agitate to ensure the granules are dissolved. Use immediately. WASH OUT THE SPRAYER THOROUGHLY AFTER USE, USING A WETTING AGENT OR PROPRIETARY TANK CLEANER WITH TWO RINSES, AS TRACES OF VALDOR FLEX MAY CAUSE HARM TO OTHER SUSCEPTIBLE PLANTS SPRAYED LATER.

Equipment

Hand-held / knapsack

Use a hand-held / knapsack sprayerfitted with a coarse nozzle using a pressure of around 1-2 bars to provide a coarse spray. Use of anti-drift nozzles or the use of a protector shield to avoid any drift is recommended.

NOZZLE: Hypro Polijet AN0.6 nozzle provided gives, subject to calibration: a coarse spray with a flow rate of 0.6 L/min at 1 bar, giving 225 L/ha at 4kph walking speed, swath width of 40 cm, 40 cm nozzle height or use similar nozzles that give coarse spray.

Good and even coverage of foliage and soil is essential for optimum activity.

Spray-train applications to railway ballast

Application to railway ballast may also be made via a spray train using a low drift, train-mounted nozzle. Good and even coverage of foliage and ballast is essential for optimum activity.

Valdor Flex - IE85325159C - A1a - *ARTICLE 85329634*

Batch number : see on the pack

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